

First students start innovative STEM program at SFCC

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It's late August at Santa Fe Community College (SFCC) and students are in a classroom meeting the instructors and educators who will be working with them over the academic year to come. As you might expect, there are math, engineering and computer science faculty present, but there are also some signs that this isn't a normal orientation day.

One of the SFCC staff explains he won't be grading anyone, and then there's a presentation from three recruiters from Los Alamos National Laboratory discussing potential internships and tours of the Lab.

Welcome to the first New Mexico cohort of STEM Core – part of a national program to make science, technology, engineering, and mathematics (STEM) career pathways more inclusive.

The Laboratory and SFCC are collaborating on the initiative that supports the students as they pursue education, internships, and ultimately employment in engineering, computer science, and information technology fields.

The program - part funded by the National Science Foundation - recruits students who are ready to take either intermediate or college algebra and prepares them for calculus in two semesters.

"The success rates for students who start in developmental math [at college] are grim, and STEM Core aims to change that," says Ed Worden, the student support specialist for the program at SFCC (who won't be issuing grades). "The program is unique because it provides grant funding for a student support specialist who attends classes, coordinates tutoring, advises, works with instructors to improve the effectiveness of their teaching, and actively engages students in co-curricular activities that prepare them for their academic journey."

As more jobs require not only technical knowledge but also flexible and creative thinking, STEM Core helps students succeed academically and be prepared for continued learning or employment. The program has been adopted by more than 30 colleges across the country, in partnership with employers such as SAP Software, NASA Jet Propulsion Laboratory and National Laboratories.

Moving through the classes as a group helps the students support each other and is also shown to increase completion rates.

"The cohort becomes a cohesive group which helps everyone be successful. They are able to share in the joys, support each other when it's difficult, and when they complete

the program they can celebrate their achievements together," says Barbara Lynn, a Laboratory recruiter who is co-ordinating the Lab's role in the program. "This is the beginning of the professional network they're building for their careers."

Ed Worden talking to the first cohort of STEM Core students.

Laboratory involvement

Los Alamos National Laboratory's contribution to the program includes providing access to summer internship opportunities for the cohort, monthly sessions on presentation and interviewing skills, tours of Laboratory facilities, and networking with managers and technical experts.

"Our biggest asset is our employees and it is through their hard work, technical excellence and dedication we continue to thrive," says Lynn. "Technicians and technologists play a critical role in the Laboratory meeting its mission deliverables - they are just as important as the scientists and engineers we hire."

"The Laboratory's involvement is crucial for this program to succeed. Students struggle to see themselves in careers they are unfamiliar with, but the collaboration between SFCC and the Lab will allow students to meet the scientists, researchers, and others who shape our world, and to see themselves in that role,' says Worden.

"For many students, the prospect of an internship or employment with the Lab is their primary motivation for studying and participating in the STEM Core program. The program recruits hardworking, high-quality participants, and prepares them for meaningful work at a world-class research facility in their own backyard."

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